

IN THE CLAIMS:

1. (Currently Amended) A method for detecting the presence of a coating on spaced fins having electromagnetic surface properties different than the electromagnetic surface properties of the coating and defining at least one passage between the fins, said method comprising the steps of;

~~detecting electromagnetic rays from the coating;~~

establishing a predetermined benchmark for the [[]]electromagnetic rays

with a first detector,

detecting electromagnetic rays from the coating with a second detector,

comparing the electromagnetic rays from the coating to the benchmark,

and

providing a signal in response to the electromagnetic rays crossing the benchmark.

2. (Original) A method as set forth in claim 1 wherein the step of detecting is further defined as detecting the reflectivity of the coating.

3. (Currently Amended) A method as set forth in claim 2 including the steps of;

propagating ~~light~~light-electromagnetic rays from a light source through the passage between fins,

reflecting at least some of the ~~light~~electromagnetic rays off the coating on the fins,

~~detecting reflected light rays reflected off the coating,~~

establishing the predetermined benchmark for the [[]]reflected ~~light~~electromagnetic rays with the first detector,

detecting reflected electromagnetic rays reflected off the coating with the second detector,

comparing the reflected ~~light~~electromagnetic rays to the benchmark, and

providing the signal in response to [[]]the reflected ~~light~~electromagnetic rays crossing the benchmark.

4. (Currently Amended) A method as set forth in claim 3 ~~including wherein~~ the step establishing the predetermined benchmark is further defined as ~~of detecting direct~~ ~~light~~electromagnetic rays passing through the passage from the source without reflecting off the fins with the first detector and ~~establishing the predetermined benchmark by~~ comparing the reflected ~~light~~electromagnetic rays to the direct ~~light~~electromagnetic rays to measure the ratio therebetween.

5. (Currently Amended) A method as set forth in claim 3 ~~including wherein~~ the step of establishing the predetermined benchmark is further defined as reflecting at least some of the ~~light~~electromagnetic rays off an un-coated section of the fins, detecting the un-coated ~~light~~electromagnetic rays reflecting off the un-coated section with the first

detector, and establishing the predetermined benchmark by comparing the lightelectromagnetic rays reflected from the coating to the lightelectromagnetic rays reflected from the un-coated section to measure the ratio therebetween.

6. (Currently Amended) A method as set forth in claim 3 wherein the step of propagating of lightelectromagnetic rays is further defined as propagating a frequency modulated light.

7. (Currently Amended) A method as set forth in claim 1 wherein the step of detecting is further defined as detecting the emissivity of the coating.

8. (Currently Amended) A method as set forth in claim 7 wherein the step of establishing the predetermined benchmark including the step of is further defined as emitting at least some of the lightelectromagnetic rays off an un-coated section of the fins, detecting the un-coated lightelectromagnetic rays emitted from the un-coated section with the first detector, and ~~establishing the predetermined benchmark by comparing the~~ lightelectromagnetic rays emitted from the coating to the lightelectromagnetic rays emitted from the un-coated section to measure the ratio therebetween.

9. (Currently Amended) A method for detecting the presence of a coating on a part having electromagnetic surface properties different than the electromagnetic surface properties of the coating, said method comprising the steps of;

~~detecting electromagnetic rays from the coating;~~

establishing a predetermined benchmark for the electromagnetic rays with

a first detector,

detecting electromagnetic rays from the coating with a second detector,

comparing the electromagnetic rays to the benchmark, and

providing a signal in response to [[]]the electromagnetic rays crossing the benchmark.

10. (Currently Amended) A heat exchanger assembly comprising;

spaced fins having electromagnetic surface properties and defining at least one passage between the fins,

a coating on said fins having electromagnetic surface properties different than the electromagnetic surface properties of said fins,

a first detector for establishing a predetermined benchmark for the electromagnetic rays;

a ~~first~~second detector for detecting electromagnetic rays from said coating,

and

a comparator for comparing the electromagnetic rays from said coating to ~~the predetermined benchmark for the electromagnetic rays~~ and providing a signal in response to ~~[[]]the~~ electromagnetic rays crossing the benchmark.

11. (Currently Amended) An assembly as set forth in claim 10 including a light source for propagating ~~light~~electromagnetic rays through said passage between said fins for reflecting at least some of the ~~light~~electromagnetic rays off said coating on said fins.

12. (Currently Amended) An assembly as set forth in claim 11 ~~including~~ wherein said ~~second~~first detector for detecting ~~ing~~ direct ~~light~~electromagnetic rays passing through the passage from said light source without reflecting off said fins, and said comparator is responsive to said first and second detectors for comparing the reflected

~~light~~electromagnetic rays to the direct ~~light~~electromagnetic rays to measure the ratio therebetween.

13. (Currently Amended) An assembly as set forth in claim 10 wherein said fins include an un-coated section, and ~~including a said second~~first detector ~~for detecting~~ the un-coated rays from said un-coated section, and said comparator is responsive to said first and second detectors for comparing the rays from the coating to the rays from the un-coated section to measure the ratio therebetween.

14. (Original) An assembly as set forth in claim 11 wherein said light source comprises a frequency modulated light.

15. (Original) An assembly as set forth in claim 11 wherein said light source comprises a light emitting diode.

Please add the following new claims:

16. (New) A method as set forth in claim 8 wherein the electromagnetic rays are emitted in the absence of a light source.